UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,007	09/30/2003	Jaya L. Jeyaseelan	P16729	4850
45445 7590 03/29/2010 LeMOINE PATENT SERVICES, PLLC C/O CPA GLOBAL P. O. BOX 52050			EXAMINER	
			SMITH, SHEILA B	
MINNEAPOLI	•		ART UNIT	PAPER NUMBER
			2617	
			MAIL DATE	DELIVERY MODE
			03/29/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/675,007	JEYASEELAN ET AL.				
Office Action Summary	Examiner	Art Unit				
	SHEILA B. SMITH	2617				
The MAILING DATE of this communication app	pears on the cover sheet with the c	orrespondence address				
Period for Reply	/ IO OFT TO EVEIDE - MONTH!	0) 0D THIRTY (00) BANG				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>31 M</u>	arch 2008.					
	action is non-final.					
3) Since this application is in condition for allowar						
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-30</u> is/are pending in the application.						
4a) Of the above claim(s) <u>8 and 9</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)  Claim(s) <u>1-7, 10-30</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine	ır.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
<ul> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
		<b>.</b>				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P					
Paper No(s)/Mail Date 6) Other:						

Application/Control Number: 10/675,007 Page 2

Art Unit: 2617

### **DETAILED ACTION**

1. In view of the Appeal Brief filed on 3/12/008, PROSECUTION IS HEREBY

REOPENED. A new non-final office action set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an

appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee

can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have

been increased since they were previously paid, then appellant must pay the difference between

the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing

below:

# Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention. In line 2 of claim 21 states "a machine performing" the examiner is unsure if the

Application/Control Number: 10/675,007 Page 3

Art Unit: 2617

intent of the applicant is for the machine to perform an "attempt to roam when the timer expires" or if the apparatus is to perform that function.

# Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21-24 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 21 states a "medium adapted to hold machine accessible instructions," which according to the applicant's description in the specification on page 4 paragraph 0044 is disclosed as "or any other type of article that includes a medium readable by processor". The examiner contends the article could be a signal, which would make it non-statutory.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pinard et al. (U.S. Patent Number 6,580,700) in view of Jones et al. (U.S. Patent Number 6,192,245).

Application/Control Number: 10/675,007

Art Unit: 2617

Page 4

Regarding claim 1, Pinard et al. discloses essentially all the claimed invention as set forth in the instant application, further Pinard et al. discloses a data rate algorithms for use in wireless local area networks. In addition Pinard et al. discloses a method comprising: determining a metric (which reads on table) representing a quality (which reads on RSSI) of a current association between a wireless network client (mobile station) and an access point, comparing a metric against a threshold (which reads on load factor (LF) as disclosed in column 6 lines 1-36). However Pinard et al. fails to specifically teach to delay roaming attempt by the wireless network client disclose setting a timer for roaming attempt by a wireless network client.

In a similar field of endeavor Jones et al. discloses a method for determining when to handover in a multicellular communication system (the examiner contends that due to the explanation in paragraph 0011 of the applicant admitted prior art "roam and attempt to roam refer to the actions taken by the mobile station when deciding whether to end a current association disassociate and make a new association with a different access point" the examiner reads roaming attempt on handover), Jones et al. discloses setting a timer which reads on "to delay a handover to neighbor **for a given period and when the timer expires...**" as disclosed in column 6 lines 28-34) to delay roaming attempt by the wireless network client.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Pinard et al. with delay roaming attempt by the wireless network client as taught by Jones et al. for the purpose of determining whether handover is necessary to enable the mobile unit to avoid frivolous roaming.

**Regarding claim 2**, Pinard et al. in view of Jones et al. discloses essentially all the claimed invention as applied above in claim 1, further Pinard et al. discloses a metric (which reads on a table) comprises a received signal strength indicator (which reads on column 6 lines 1-4).

**Regarding claim 3**, Pinard et al. in view of Jones et al. discloses essentially all the claimed invention as applied in claim 1 above, additionally, Pinard et al. disclosed a current data rate (which reads on the abstract and column 2 lines 49-59).

**Regarding claim 4**, Pinard et al. in view of Jones et al. discloses essentially all the claimed invention as applied in claim 1 above, additionally, Pinard et al. disclosed a metric comprises a number of packet retries (which reads on column 6 lines 50-56).

**Regarding claim 5**, Pinard et al. discloses comparing a plurality of metrics against a plurality of thresholds (which reads on column 6 lines 20-35). However Pinard et al. fails to specifically disclose setting the timer in response (which reads on t column 2 lines 7-32).

In a similar field of endeavor Jones et al. discloses a method for determining when to handover in a multicellular communication system, in addition Jones et al. discloses setting a timer in response (which reads on "to delay a handover to neighbor **for a given period and when the timer expires**…" as disclosed in column 6 lines 28-34).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Pinard et al. with delay roaming attempt by the wireless network client as taught by Jones et al. for the purpose of determining whether handover is necessary.

**Regarding claim 6**, Pinard et al. in view of Jones et al. discloses essentially all the claimed invention as applied in claim 1 above, additionally, Pinard et al. discloses a metric comprises a received signal strength indicator, and the threshold is dependent on the current data rate (which reads on column 5 lines 59-67 and column 6 lines 19).

2. Claims 7, 13, 14, 20, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (U.S. Patent Number 6,192,245).

Regarding claim 7, Jones et al. discloses a method comprising a timer to delay a roaming attempt by a mobile station in a wireless network (which reads on column 6 lines 25-33), wherein the value to which the timer is influenced by a perceived quality of a current association (which reads on column 4 lines 31-44), and wherein the mobile station attempts to roam after the timer expires (which reads on column 6 lines 25-33). However Jones et al. fails to specifically disclose setting a timer to one of a plurality of values.

The examiner contends, however, that such a feature as setting a timer to a plurality of values in well known, and it would have been obvious to one skilled in the art at the time the invention was made to include setting a timer to a plurality of times for the purpose of varying the period of time used.

**Regarding claim 13**, Jones et al. discloses essentially all the claimed invention as disclosed in claim 7 above, however, Jones et al. fails to specifically discloses setting a timer comprises setting a software timer.

Art Unit: 2617

The examiner contends that especially since Jones et al. suggest setting a timer and doesn't disclose the use of a clock, it is obvious that some sort of programming or software would be used, therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to include setting a software timer as a means to knowing when it is time to move to another access point.

Regarding claim 14, Jones et al. discloses a method comprising: comparing a first metric representing a quality of a current association between a wireless network client and an access point to a first threshold and conditionally setting a timer to a first value (which reads on column 3 lines 60-62), comparing a second metric further representing the quality of a current association between a wireless network client against a threshold; and setting a timer for roaming attempt by a wireless network client and an access point to a second threshold and conditionally setting a timer to a second value (which reads on column 3 lines 63-67 and column 4 lines 8-9), and attempting to roam when the timer expires (the examiner contends that due to the explanation in paragraph 0011 of the applicant admitted prior art "roam and attempt to roam refer to the actions taken by the mobile station when deciding whether to end a current association disassociate and make a new association with a different access point" the examiner reads roaming attempt on handover, which read on column 4 lines 1-4).

**Regarding claim 20**, Jones et al. discloses essentially all the claimed invention as applied in claim 14 above, additionally Jones et al. disclose when a mobile station detects that a neighbor cell is received at a power which is higher than the threshold it starts a timer (column 3 lines 60-

Art Unit: 2617

62), however, Jones et al. fails to specifically disclose comparing a percentage of missed beacons to a threshold.

The examiner contends that especially since Jones et al. suggest comparing the power level to a threshold as a criteria to determine when to roam, therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to include another criteria such as the comparison of missed beacons to a threshold as a means to knowing when to move or roam to another access point.

Regarding claim 21, Jones et al. discloses a apparatus (which reads on the mobile station 1) including a medium adapted to hold machine assessable instructions that when accessed result in a machine performing: comparing a first metric representing a quality of a current association between a wireless network client and an access point to a first threshold and conditionally setting a timer to a first value (which reads on column 3 lines 60-62), comparing a second metric further representing the quality of a current association between a wireless network client against a threshold; and setting a timer for roaming attempt by a wireless network client and an access point to a second threshold and conditionally setting a timer to a second value (which reads on column 3 lines 63-67 and column 4 lines 8-9), and attempting to roam when the timer expires (the examiner contends that due to the explanation in paragraph 0011 of the applicant admitted prior art "roam and attempt to roam refer to the actions taken by the mobile station when deciding whether to end a current association disassociate and make a new association with a different access point" the examiner reads roaming attempt on handover, which read on column 4 lines 1-4).

Application/Control Number: 10/675,007

Page 9

Art Unit: 2617

6,580,700)

2. Claims 10-12, 15-19,22-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (U.S. Patent Number 6,192,245) in view of Pinard et al. (U.S. Patent Number

**Regarding claim 10**, Jones et al. discloses essentially all the claimed invention as disclosed in claim 7 above, however, Jones et al. fails to specifically discloses (a) the perceived quality of the current association is relatively low, and (b) the timer is set to a value that is relatively low.

In same field of endeavor Pinard et al. discloses (a) the perceived quality of the current association is relatively low (which reads on column 5 lines 32-39).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve Jones et al. with the teachings of Pinard et al. for the purpose of determining if the mobile can operate at a different rate with a new access point.

Additionally the examiner contends, that (b) setting a timer to a value that is relatively low in well known, and it would have been obvious to one skilled in the art at the time the invention was made to include setting a timer to a value that is relatively low for the purpose of varying the period of time to be used.

**Regarding claim 11**, Jones et al. discloses essentially all the claimed invention as disclosed in claim 7 above, however, Jones et al. fails to specifically discloses (a) the perceived

quality of the current association is relatively high, (b) the timer is set to a value that is relatively high (which reads on column 5 lines 40-47).

In same field of endeavor Pinard et al. discloses (a) the perceived quality of the current association is relatively high (which reads on column 5 lines 40-47).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve Jones et al. with the teachings of Pinard et al. for the purpose of determining if the mobile can operate at a different rate with a new access point

Additionally the examiner contends, that (b) setting a timer to a value that is relatively high in well known, and it would have been obvious to one skilled in the art at the time the invention was made to include setting a timer to a value that is relatively high for the purpose of varying the period of time to be used.

Regarding claim 12, Jones et al. discloses essentially all the claimed invention as disclosed in claim 7 above, however, Jones et al. fails to discloses a timer comprises setting a hardware timer (which reads on column 2 lines 7-32).

In same field of endeavor Pinard et al. discloses setting a hardware timer (as exhibited by clock 35 of figure 6, and which reads on column 6 lines 36-37 a0nd column 13 lines 10-12).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jones et al. with setting a hardware timer as taught by Pinard et al. for the purpose of activating the mobile unit.

**Regarding claim 15**, Jones et al. discloses essentially all the claimed invention as applied in claim 14 above, however, Jones et al. fails to specifically disclosed a current data rate.

In same field of endeavor Pinard et al. discloses a current data rate (which reads on the abstract and column 2 lines 49-59).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jones et al. with using a current data rate as taught by Pinard et al. for the purpose of associating with the eligible access point at the highest data rate.

Regarding claim 16, Jones et al. discloses essentially all the claimed invention as applied in claim 14 above, however, Jones et al. fails to specifically disclose a first threshold corresponds to the lowest possible data rate.

In same field of endeavor Pinard et al. discloses a threshold corresponds to the lowest possible data rate (which reads on column 2 lines 60-64).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jones et al. with a threshold corresponds to the lowest possible data rate as taught by Pinard et al. for the purpose of associating with the eligible access point at the highest data rate.

**Regarding claim 17**, Jones et al. discloses essentially all the claimed invention as applied in claim 14 above, however, Jones et al. fails to specifically disclose the second metric comprises a received signal strength indicator.

In same field of endeavor Pinard et al. discloses a received signal strength indicator (which reads on the abstract and column 6 lines 1-5).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jones et al. with using a received signal strength indicator as taught by Pinard et al. for the purpose of associating with the most eligible access point with the strongest RSSI.

**Regarding claim 18**, Jones et al. discloses essentially all the claimed invention as applied in claim 14 above, however, Jones et al. fails to specifically disclose a current data rate.

In same field of endeavor Pinard et al. discloses a current data rate (which reads on the abstract and column 2 lines 49-59).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jones et al. with using a current data rate as taught by Pinard et al. for the purpose of associating with the eligible access point at the highest data rate.

**Regarding claim 19**, Jones et al. discloses essentially all the claimed invention as applied in claim 14 above, however, Jones et al. fails to specifically disclose a current data rate.

In same field of endeavor Pinard et al. discloses a current data rate (which reads on the abstract and column 2 lines 49-59).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jones et al. with using a current data rate as taught by Pinard et al. for the purpose of associating with the eligible access point at the highest data rate.

Regarding claim 22, Jones et al. discloses essentially all the claimed invention as applied in claim 14 above, however, Jones et al. fails to specifically disclosed a current data rate.

In same field of endeavor Pinard et al. discloses a current data rate (which reads on the abstract and column 2 lines 49-59).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jones et al. with using a current data rate as taught by Pinard et al. for the purpose of associating with the eligible access point at the highest data rate.

**Regarding claim 23**, Jones et al. discloses essentially all the claimed invention as applied in claim 14 above, however, Jones et al. fails to specifically disclose a first threshold corresponds to the lowest possible data rate.

In same field of endeavor Pinard et al. discloses a threshold corresponds to the lowest possible data rate (which reads on column 2 lines 60-64).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jones et al. with a threshold corresponds to the lowest possible data rate as taught by Pinard et al. for the purpose of associating with the eligible access point at the highest data rate.

**Regarding claim 24** Jones et al. discloses essentially all the claimed invention as applied in claim 14 above, however, Jones et al. fails to specifically disclose the second metric comprises a received signal strength indicator.

In same field of endeavor Pinard et al. discloses a received signal strength indicator (which reads on the abstract and column 6 lines 1-5).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jones et al. with using a received signal strength indicator as

taught by Pinard et al. for the purpose of associating with the most eligible access point with the strongest RSSI.

Regarding claim 25, Jones et al. discloses a apparatus (1 mobile station) comprising: a processor (which is a inherent element in a mobile phone) is adapted to set a timer based on a perceived quality of a current association (which reads on column 3 lines 58-62), and further adapted to attempt roaming when the timer expires (which reads on column 4 lines 2-5). However Jones et al. fails to specifically disclose a radio interface to interact with a wireless network; and a processor coupled to the radio interface.

In same field of endeavor Pinard et al. discloses a radio interface (34) to interact with a wireless network; and a processor (which reads on ASIC 33) coupled to the radio interface (34) (as exhibited in figure 6).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jones et al. with using a radio interface to interact with a wireless network; and a processor coupled to the radio interface as taught by Pinard et al. for the purpose of causing the mobile to enter the roaming mode.

**Regarding claim 26**, Jones et al. discloses essentially all the claimed invention as disclosed in claim 25 above, however, Jones et al. fails to discloses a timer is at least partially implemented in hardware.

In same field of endeavor Pinard et al. discloses a timer is at least partially implemented in hardware (as exhibited by clock 35 of figure 6, and which reads on column 6 lines 36-37 and column 13 lines 10-12).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jones et al. with a timer is at least partially implemented in hardware as taught by Pinard et al. for the purpose of activating the mobile unit.

**Regarding claim 27**, Jones et al. in view of Pinard et al. discloses essentially all the claimed invention as disclosed in claim 25 above, however, the combination of Jones et al. in view of Pinard et al. fails to specifically discloses a timer is at least partially implemented in software.

The examiner contends that especially since Jones et al. suggest setting a timer and doesn't disclose the use of a clock, it is obvious that some sort of programming or software would be used, therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a timer is at least partially implemented in software as a means to knowing when it is time to move to another access point.

Regarding claim 28, Jones et al. discloses a electronic system comprising: a processor (which is a inherent element in a mobile phone) is adapted to set a timer based on a perceived quality of a current association (which reads on column 3 lines 58-62), and further adapted to attempt roaming when the timer expires (which reads on column 4 lines 2-5). However Jones et al. fails to specifically disclose a Omni-directional antenna, a radio interface to interact with a wireless network; and a processor coupled to the radio interface.

In same field of endeavor Pinard et al. discloses a omni-directional antenna (32), radio interface (34) to interact with a wireless network; and a processor (which reads on ASIC 33) coupled to the radio interface (34) (as exhibited in figure 6).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jones et al. with using a radio interface to interact with a wireless network; and a processor coupled to the radio interface as taught by Pinard et al. for the purpose of receiving radio signals which causes the mobile unit to enter a roaming mode.

**Regarding claim 29**, Jones et al. discloses essentially all the claimed invention as disclosed in claim 28 above, however, Jones et al. fails to discloses a timer is at least partially implemented in hardware.

In same field of endeavor Pinard et al. discloses a timer is at least partially implemented in hardware (as exhibited by clock 35 of figure 6, and which reads on column 6 lines 36-37 and column 13 lines 10-12).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jones et al. with a timer is at least partially implemented in hardware as taught by Pinard et al. for the purpose of activating the mobile unit.

**Regarding claim 30**, Jones et al. in view of Pinard et al. discloses essentially all the claimed invention as disclosed in claim 28 above, however, the combination of Jones et al in view of Pinard et al. fails to specifically discloses a timer is at least partially implemented in software.

Art Unit: 2617

The examiner contends that especially since Jones et al. suggest setting a timer and doesn't disclose the use of a clock, it is obvious that some sort of programming or software would be used, therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a timer is at least partially implemented in software as a means to knowing when it is time to move to another access point.

# Response to Arguments

Applicant's arguments with respect to claims 1-7, and 10-30 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHEILA B. SMITH whose telephone number is (571)272-7847. The examiner can normally be reached on Monday-Thursday 6:00 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on 571-272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/675,007 Page 18

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dwayne D. Bost/ Supervisory Patent Examiner, Art Unit 2617

/Sheila B. Smith/ Examiner, Art Unit 2617 March 16, 2010